

## WHAT IS CLAIMED IS:

1. A method of executing an application on a data processing system, comprising:

5 retrieving information indicative of a set of compatible execution environments, wherein each such compatible execution environment is suitable for executing the application;

searching files of the system to locate any compatible execution environments installed on the system;

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responsive to locating at least one compatible execution environment installed on the system, selecting a compatible execution environment from the located execution environments and executing the application within the selected execution environment; and

15 responsive to failing to locate a compatible execution environment, issuing a user detectable alert.

2. The method of claim 1, wherein retrieving the compatible execution environment information is further characterized as retrieving prioritized execution environment information and wherein selecting an execution environment is further characterized as selected, from the set of located 20 execution environments, the execution environment having the highest priority.

3. The method of claim 2, wherein searching the system's files comprises searching within a set of directories specified in a PATH variable of the system.

25 4. The method of claim 1, wherein said application is further characterized as a Java® application and wherein searching the system file's comprises searching the system's files for a set of Java® runtime environments.

5. The method of claim 4, wherein said retrieving information comprises retrieving a list of 30 compatible JREs from a manifest of a Java® archive (JAR) file associated with the application.

6. The method of claim 1, wherein said retrieving information and searching the system's files occurs in response to downloading the application via a network such that the selected execution environment is identified prior to executing the application.

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7. The method of claim 1, wherein said retrieving information and searching the system's files occurs

each time the application is executed.

8. A data processing system including processor means, storage means, input/output means, and an operating system, the data processing system further comprising:

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a set of execution environments, wherein each execution environment is suitable for executing compatible application programs;

an application program;

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a file parser to retrieve execution environment information associated with the application, wherein the execution environment information indicates execution environments compatible with the application;

15 a search engine to receive the execution environment information from the file parser and to use the received information to identify any compatible execution environments on the system; and

means for associating the application with one of the compatible execution environments identified by the search engine and for invoking the associated execution environment when executing

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the application.

9. The system of claim 8, wherein the execution environment information indicates compatible execution environments in a prioritized ordering and wherein the means for associating the application with one of the compatible execution environments comprises means for associating the 25 application with an execution environment on the system having the highest prioritization.

10. The system of claim 8, further comprising means for issuing an alert responsive to the search engine failing to identify any compatible execution environments on the system.

30 11. The system of claim 10, further comprising means for prompting a user to execute the application using one of the identified execution environments following said failing to identify any compatible execution environments on the system.

12. The system of claim 10, further comprising means for obtaining a compatible execution 35 environment via a network to which the system is connected following said failing to identify any compatible execution environments on the system.

13. The system of claim 8, wherein the application is a Java® application and wherein the file parser is configured to extract a list of compatible execution environments from a manifest file of a Java® archive (JAR) file associated with the application.

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14. The system of claim 8, wherein the application is a Java® application wherein the file parser is configured to extract a list of compatible execution environments from a JNLP file associated with the application.

10 15. The system of claim 8, wherein the search engine is configured to limit its search to a specified set of directories.

16. The system of claim 15, wherein the specified set of directories comprises the set of directories identified in a system PATH variable.

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17. A computer program product comprising a set of computer executable instructions for identifying an execution environment for an application program, wherein at least a portion of said set of instructions reside on a computer readable medium, the computer program product comprising:

20 code means for identifying a set of execution environments compatible with an application program;

code means for determining whether a data processing system includes at least one of the compatible execution environments; and

25 code means for associating the application program with one of the compatible execution environments wherein subsequent execution of the application occurs within the compatible execution environment.

18. The computer program product of claim 17, wherein the application program comprises a Java® application program and wherein the determining code means comprises code means for extracting a list of compatible execution environments from a file associated with the application program, wherein the file is selected from a set of files consisting of a Java® archive (JAR) file and a Java® Network Launch Protocol (JNLP) formatted file.

30 35 19. The computer program product of claim 18, wherein the determining code means further comprises code means for retrieving a system PATH variable identifying a set of file directories and

search the identified set of file directories for the set of compatible execution environments.

20. The computer program product of claim 19, wherein the list of compatible execution environments has an ordered priority and wherein the determining code means for associating the application program comprises codes means for associating the application program with the compatible execution environment having the highest priority.